

## **REMARKS**

Claims 1-41 are pending in the above identified application. The Examiner has rejected claims 1-4, 10-17, and 32-41. The Examiner has objected to claims 5-9 and 18-31. Applicants have amended claims 1 and 11 for clarity.

### **Claim Objections**

The Examiner has objected to claims 11-17 under 37 C.F.R. § 1.75(c) as being in improper form. As pointed out by the Examiner, claim 11 depends from claim 12, which depends from claim 11. Accordingly, claim 11 has been amended to depend from claim 2. Applicants therefore request that the Examiner remove this objection.

### **Claim Rejections Under 35 U.S.C. § 103**

#### **Claims 1-4 and 32-41**

The Examiner has rejected claims 1-4 and 32-41 under 35 U.S.C. § 103 as being unpatentable over Chan (6,259,745) in view of Wang (5,822,368).

The Examiner rejected claims 1-4 and 32-41 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,259,745 (“Chan”) in view of U.S. Patent No. 5,822,368 (“Wang”). Claim 1 has been amended to recite “a plurality of receivers, each of the plurality of receivers receiving signals from one of a plurality of transmission bands, the plurality of transmission bands being transmitted on a single transmission medium;” claim 36 recites “receiving a transmitted signal from a transmission medium into a plurality of receivers;” and claim 41 recites “means for transmitting data into multiple channels on a transmission medium,

each of the multiple channels having a carrier frequency.” At least these elements of claims 1, 36, and 41 are not taught by Chan. Wang does not cure this defect in the teachings of Chan.

Chan teaches a system where each channel is transmitted on its own transmission medium. As taught in Chan, and shown in Figure 1 of Chan,

Each transmitter circuit is coupled to a respective wire pair transmission media. Although FIG. 1 illustrates a single driver circuit corresponding to a respective twisted wire pair, the illustration is simplified for ease of explanation of the principles of the invention. It should be understood that the transmitter within each transceiver 6 represents a multiplicity of differential output cells, the sum of which defines the physical signals directed to the transmission medium

(Chan, col. 6, lines 36-43). Chan does not teach that each of the twisted copper pair can carry a plurality of channels, or transmission bands, as recited in claims 1, 36, and 41.

Further, Chan also does not teach “a cross-channel interference canceller coupled to the plurality of receivers, the cross-channel interference canceller coupled to receive the signals from each of the plurality of transmission bands,” as recited in claim 1, “cancelling the cross-channel interference in each of the plurality of receivers,” as recited in claim 36, or “means for correcting the data from each of the multiple channels for cross-channel interference,” as is recited in claim 41. Again, Wang does not cure the defects in the teachings of Chan.

Chan teaches a system where “[a]n adaptive electronic transmission signal cancellation circuit separates transmit data from receive data in a bidirectional communication system operating in full duplex mode.” (Chan, Abstract, *see also* Chan, col. 6, line 13-16). Therefore, Chan teaches correction of the data on a single line due to transmitting and receiving on the same line, and does not teach cancellation between channels as recited in these claims.

Therefore, Claims 1, 36, and 41 are allowable over the combination of Chan and Wang. Claims 2-4 and 32-35 depend from claim 1 and are therefore allowable over the combination of

Chan and Wang for at least the same reasons as is claim 1. Claims 37-40 depend from claim 36 and are allowable over the combination of Chan and Wang for at least the same reasons as is claim 36.

#### Claims 3-4 and 10

The Examiner rejected claims 3-4 and 10 under 35 U.S.C. 103(a) as being unpatentable over Chan in view of Wang and further in view of U.S. Patent No. 6,163,563 ("Baker"). However, as discussed above, Claim 1 is allowable over Chan and Wang. Baker does not cure the defects in the teachings of Chan and Wang. Therefore, claim 1 is allowable over the combination of Chan, Wang, and Baker.

Claims 3-4 and 10 depend from claim 1 and are therefore allowable over the combination of Chan, Wang, and Baker for at least the same reasons as is claim 1.

#### Allowable Subject Matter

Claims 5-9 and 18-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, as discussed above, claims 5-9 and 18-31 depend from claim 1, which is an allowable claim. Therefore, Applicants have not amended claims 5-9 and 18-31 to include these limitation of the base claim and intervening claims.

Conclusion

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

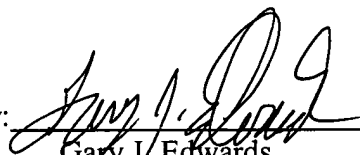
Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: March 28, 2006

By: \_\_\_\_\_



Gary J. Edwards

Reg. No. 41,008

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